

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered). Please AMEND claims 4-10 in accordance with the following:

1. (CANCELLED)

2. (CANCELLED)

3. (CANCELLED)

4. (Currently Amended) A method of creating a defocused image from an input image, comprising ~~the steps of~~:

(a) receiving an input image including a plurality of pixel data;

(b) selecting one pixel data from said plurality of pixel data;

(c) converting said selected pixel data from a predetermined scale to a linear scale to generate light data having some light amount;

(d) allocating said light data to surrounding pixels ~~surrounded by an aperture which has a predetermined shape~~ within the area whose shape is determined from a shape of an aperture to generate a defocused disk image having a set of allocated light data so that each of said set of allocated light data is substantially equal to each other and a total light amount of said defocused disk image becomes equal to the light amount of said light data; and

(e) repeating ~~the steps~~ (b) through (d) for all pixel data included in said input image to create a defocused image.

5. (Currently Amended) The method according to claim 4, further comprising ~~the step of~~

:

converting a scale of said defocused disk image back to said predetermined scale.

6. (Currently Amended) The method according to claim 4, further comprising ~~the steps of~~

determining whether said input image is represented in said linear scale, pixel data of said input image having light data having some light amount; and

skipping ~~the step~~ (b) if said input image is already represented in linear scale.

7. (Currently Amended) The method according to claim 4, further comprising ~~the step of~~

:

determining said size of said defocused disk image based on distance information of said selected pixel data,

wherein said light data is allocated to surrounding pixels surrounded by an aperture ~~which has a predetermined shape within the area whose shape is determined from a shape of an aperture~~ to generate said defocused disk image based on said size of said defocused disk image ~~in the step of allocating light data.~~

8. (Currently Amended) A method of creating a defocused image from an input image, comprising ~~the steps of~~:

(a) receiving an input image including a plurality of pixel data;

(b) selecting one pixel data from said plurality of pixel data;

(c) converting said selected pixel data from a predetermined scale to a linear scale to generate light data having some light amount;

(d) determining a size of a defocused disk image based on distance information of said selected pixel data;

(e) allocating, based on said size of said defocused disk image, said light data to surrounding pixels surrounded by an aperture ~~which has a predetermined shape within the area whose shape is determined from a shape of an aperture~~ to generate said defocused disk image so that a total light amount of said defocused disk image becomes equal to the light amount of said light data; and

(f) repeating ~~the steps~~ (b) through (e) for all pixel data included in said input image to create a defocused image.

9. (Currently Amended) A computer program product in a data processing system for creating a defocused image from an input image, comprising:

(a) program code to receive an input image including a plurality of pixel data;

(b) program code to select one pixel data from said plurality of pixel data;

(c) program code to convert said selected pixel data from a predetermined scale to a linear scale to generate light data having some light amount;

(d) program code to allocate said light data over surrounding pixels ~~surrounded by an aperture which has a predetermined shape within the area whose shape is determined from a shape of an aperture~~ to generate a defocused disk image having a set of allocated light data so that each of said set of allocated light data is substantially equal to each other and a total light amount of said defocused disk image becomes equal to the light amount of said light data; and

(e) program code to repeat the processes of program code (b) through (d) for all pixel data included in said input image to create a defocused image.

10. (Currently Amended) A computer program product in a data processing system for creating a defocused image from an input image, comprising:

(a) program code to receive an input image including a plurality of pixel data;

(b) program code to select one pixel data from said plurality of pixel data;

(c) program code to convert said selected pixel data from a predetermined scale to a linear scale to generate light data having some light amount;

(d) program code to determine a size of a defocused disk image based on distance information of said selected pixel data;

(e) program code to allocate, based on said size of said defocused disk image, said light data to surrounding pixels ~~surrounded by an aperture which has a predetermined shape within the area whose shape is determined from a shape of an aperture~~ to generate said defocused disk image so that a total light amount of said defocused disk image becomes equal to the light amount of said light data; and

(f) program code to repeat the processes of program code (b) through (e) for all pixel data included in said input image to create a defocused image.